

MINUTES OF THE APRIL 2010 TELECONFERENCE OF THE NATIONAL HYDROGEN AND FUEL CELLS CODES & STANDARDS COORDINATING COMMITTEE

MEETING DATE: April 7, 2010
FACILITATOR: Chad Blake, NREL

1. Roll Call - Chad Blake

[Attendees](#) (11Kb PDF)

2. Review of Anti-Trust Guidelines - Tony Androsky

[Antitrust Guidelines](#) (27Kb PDF)

3. Review of/Corrections to Draft Minutes of February 2010 Teleconference Meeting

[Approved with changes](#) (91Kb PDF)

4. DOE/HQ Update – Antonio Ruiz

No update

5. California Hydrogen Standards - John Mough/Gary Castro

No update

6. Hydrogen Industry Panel on Codes (HIPOC) Activities - Bob Boyd / Glenn Scheffler

No update

7. NFPA Activities - Paul May/Marty Gresho

No update

8. NREL Activities - Carl Rivkin

Carl was not on the call to provide an update, so Chad updated on the activities he could. Chad is continuing on the NREL stationary FC gap analysis and is receiving good input. Sensor test lab work at NREL is continuing. Chad reminded those on the call that the previous, 6-fuel gap analysis is now available for those who are interested in downloading it from NREL's website.

9. SNL Activities - Dan Dedrick

Sandia reps were not on the call.

Sandia will be hosting a Hydrogen Safety Codes and Standards Workshop focusing on early market fuel cell applications such as forklifts and APUs on April 28th – 29th, 2010.

The workshop will provide a forum for the leadership of code development organizations, OEMs, integrators and industrial gas companies to identify barriers to rapid deployment of early market fuel cell technologies. The workshop will include panel discussions with representatives from Nuvera Fuel Cells, Plug Power, and Air Products, NFPA, UL, CSA, and others. This workshop is structured to produce two significant products:

1. Identification of areas of coordination between UL, CSA, NFPA, ISO etc code language
2. Identification of key R&D areas that can enable risk-informed code development and facilitate FCT deployment

Risk-informed codes & standards (C&S), focus on fuel cell lift trucks, C&S activities by UL and CSA, discussion on areas which are key areas for risk informed c&s work, working group on CSA HPIT 1, workshop on fuel cell lift truck safety, fuel quality and measurement, fast-filling at 350 and 700 bar. Should have some tank testing data from China on type 4 tanks. Also look at possibility of holding a follow up workshop in China. Deadline for badging is this Friday. More info on this will be sent to the email list for this group, and posted on the NHA's Hydrogen and Fuel Cell Safety Report website. Bob Boyd noted that this will be a very good event, though this date conflicts with CGA's annual mtg, where all the hydrogen tank manufacturers will be gathering - it is unfortunate that they won't be able to attend this event. It was also requested that the presentations be made available, perhaps through NHA's Hydrogen and Fuel Cell Safety Report website. Webinar capability will be provided.

Registration details will be provided to all members of the NHFCCSCC within the next few hours, as the deadline to register to participate in person is this Friday.

10. LANL Activities - Cathy Gregoire-Padro

No update

11. ANL Activities - Walt Podolski

No update

12. PNNL Activities - Steve Weiner

No update

13. IEC/TC105 Activities - Kelvin Hecht

Kelvin was unable to attend but provided the following written report:

TC105 – Fuel Cell Technologies

- WG#3 (Stationary Fuel Cells-Safety)
 - The Working Group will meet in Geneva June 14-15, and in Seattle October 12-13 to address comments to the CD for the 2nd edition.
- WG#4 (Stationary Fuel Cells- Performance)
 - The CDV for the 2nd edition is expected in April
 - The CD for the 1st edition for small power systems is expected in May.
- WG#8 (Micro Fuel Cells – Safety)
 - IEC 62282-6-100 was published in March.
 - Meeting in Geneva June 15-16 will start work on additional fuels.
- WG#10 (Micro Fuel Cells – Fuel Cartridge Interchangeability)
 - A new standards is being proposed, 62282-6-301, to address interchangeable power connector and data communication protocol. Closing date for voting – May 21st.

14. ISO/TC197 Activities - Glenn Scheffler/Jill Thompson

Glenn Scheffler provided the following update on ISO/TC 197 activities:

April 2010 Update

ANSI-Accredited U.S. TAG for ISO/TC 197, Hydrogen technologies

1. Ballots in progress
 - ISO/FDIS 26142, Hydrogen detection apparatus — Stationary applications
U.S. TAG vote due April 5; ballot terminates May 1.
 - ISO/FDIS 17268, Gaseous hydrogen land vehicle refueling connection devices
U.S. TAG vote due April 19; ballot terminates June 25.

- Systematic review of ISO 16110-1:2007, Hydrogen generators using fuel processing technologies — Part 1: Safety
U.S. TAG vote due May 14; ballot terminates June 15.
- 2. Recently closed ballots
 - Systematic review of ISO 13985:2006, Liquid hydrogen — Land vehicle fuel tanks
U.S. TAG vote of "Abstain" was forwarded to ANSI
ISO ballot ended March 15
 - ISO/DIS 22734-2, Hydrogen generators using water electrolysis process — Part 2: Residential applications
U.S. TAG vote of "Approve with comments" was forwarded to ANSI
ISO ballot ended April 5
- 3. Upcoming meetings
 - U.S. TAG for ISO/TC 197
Date/location: Thursday, May 6, 2010 – this meeting will be held both as a face-to-face meeting in conjunction with the National Hydrogen Association's Hydrogen Conference & Expo in Long Beach, California, and as a webconference for those TAG members not attending the NHA Conference
 - ISO/TC 197 plenary
Date/location: Sunday, May 16, 2010, 9:30 AM to 5:00 PM, Essen, Germany.
 - ISO/TC 197/WG 15
Date/location: Wednesday, May 19, 2010, 10:00 AM to 4:00 PM, Essen, Germany.

15. Fuel Cell Forklift Issues - Aaron Harris

No update

16. NIST Activities - Juana Williams

Juana noted there was nothing new to report

17. CSA America Activities - Julie Cairns

Julie was unable to attend but offered to answer any questions by e-mail.

18. SAE Activities - Mike Steele/Glenn Scheffler

Mike Steele reported that the next meeting would be in June, and suitable dates were being looked into. The Safety working group would not be meeting.

Glenn Scheffler noted the first of a series of teleconferences would be held later that day to develop draft revisions for J2579 which would go to ballot in the Fall.

19. ASTM D.03 Activities - Jackie Button

Jackie reported the next meeting would be in Kansas City at the end of June. The Fuel Guidance document is now open for comment and can be found at www.calepa.ca.gov/biofuels. The document includes requirements for hydrogen. She recommended that ICC, NFPA, NIST, and other interested parties take a look at the draft – particularly pages 13, 15 and 51. The deadline for comments is April 21.

- [Matrix of Activities](#) (76Kb PDF)

21. NHA Activities - Karen Hall

Geoff Bromaghim announced that arrangements had been made for the May in-person meeting of the NHFCCSCC in conjunction with the NHA Conference. The meeting will be held as follows:

Thursday, May 6, 8 - 10 am

National Hydrogen and Fuel Cell Codes & Standards Coordinating Committee In-Person Meeting - Hyatt Regency Long Beach, Room Shoreline B

Meeting agenda will feature the regular monthly SDO/CDO updates as well as presentations and discussion on the key topics. Participants in the call were asked for suggestions for the 3-4 topics they felt are most timely for the in-person meeting. The following topics were agreed and discussion leaders were suggested.

- Hydrogen Fuel Cell Forklift Trucks and Summary of Sandia's Hydrogen Safety, Codes and Standards Workshop
- Fuel Quality –PEM Fuel Cells in Vehicles and Stationary Applications
- ISO 20100 – Hydrogen Refueling Stations
- Report on Results from CGA's Annual Meeting

This meeting is open to all interested parties.

21. USFCC Activities - Tony Androsky

No update